REMARKS

1. Specification Amendments.

Applicant has amended title to conform with USPTO practices. No new matter has been added by this amendment.

2. Claim Amendments.

Claims 9 and 11 have been amended to remove the multiple dependency. Claims 31 and 32 have been amended to correct the typographical error. New Claims 35-38 have been added. No new matter has been added any of these amendments.

3. 35 USC 103 Rejections.

Claims 1, 3, 5, 7, 12-21, 24-28, 31, 32 and 34 have been rejected under 35 USC 103 as being unpatentable over Herden et al in view of Doelling. Applicant respectfully traverses these rejections.

For a claim to be determined obvious (or nonobvious) under 35 USC 103, the claimed material must have been obvious to person of ordinary skill in the art from the prior art. An obviousness determination requires examining (1) the scope of the prior art, (2) the level of skill in the art, and (3) the differences between the prior art and Applicant's invention. *Litton Systems, Inc. v. Honeywell, Inc.*, 117 SCt 1270 (1970). A mere suggestion to further experiment with disclosed principles would not render obvious an invention based on those principles. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 19 USPQ2d 1432 (Fed. Cir. 1991). In fact, an applicant may use a reference as his basis for further experimentation and to create his invention. *Id.*

The fact that each element in a claimed invention is old or unpatentable does not determine the nonobviousness of the claimed invention as a whole. *See Custom Accessories, Inc., v. Jeffrey-Allan Industries*, 1 USPQ2d 1196 1986 (Fed. Cir. 1986). The prior art must not be given an overly broad reading, but should be read in the context of the patent specifications and ***as intended by reference authors***. *Durling v. Spectrum Furniture Co.*, 40 USPQ2d 1788 (Fed

Cir 1996) (Federal Circuit held that district court erred by giving a "too broad an interpretation" of claims in a sofa patent to invalidate another on the nonobviousness standard).

The Federal Circuit has made it clear that the nonobviousness standard is applied wrongly if a court or an examiner: (1) improperly focuses on "a combination of old elements" rather than the invention as a whole; (2) ignores objective evidence of nonobviousness; (3) pays lip service to the presumption of validity; and (4) fails to make sufficient *Graham* findings. *Custom Accessories, Inc.*, 1 USPQ2d 1196 (Fed. Cir. 1986). Applying the nonobviousness test counter to these principles counters the principle that a patent application is presumed nonobvious. *Id.* To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143.

Herdon uses zeolites, which tend to absorb, not scrub, mercury. When zeolites are heated, the mercury comes back off. Herndon scrubs out and then pulls the volatilized elemental mercury out, using only air. In contrast, the present invention removes mercury by heating in air in the presence of a noncombustible material.

Doelling uses air and nitrogen for the fluidizing agent. Doelling discusses only a batch process. It is known that continuous processes using microwave energy is difficult to make efficient. In a continuous process using microwave energy heating one often suffers significant leakage of energy. Herndon is a continuous process but does not use microwave energy.

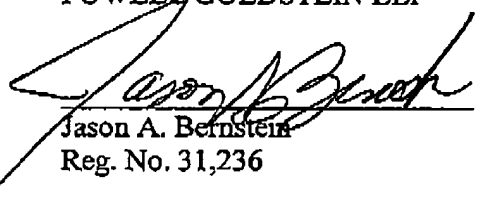
There is no motivation to use the microwave energy process of Doelling with the waste material and heating process of Herndon as such would be impracticably expensive.

CONCLUSION

Applicant submits that the present application is in proper condition for allowance, and respectfully requests such action.

If the Commissioner or the Examiner has any questions that can be resolved over the telephone, please contact the below signed patent attorney of record.

Respectfully submitted,
POWELL GOLDSTEIN LLP



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